ABSTRACT

Method and apparatus for real time measuring of an optical signal to noise ration (OSNR) of an optical channel is disclosed. The apparatus comprises a fiber Bragg grating for reflecting a signal component of the optical channel and for transmitting a noise component of the optical channel therethrough. Two photodetectors are provided disposed at two ends of the fiber Bragg grating for detecting a fraction of the reflected signal component and the transmitted noise component respectively. Electrical outputs of the photodetectors are communicated to a microprocessor for determining the OSNR. The invention provides a simple, compact, reliable, relatively fast and inexpensive technique to monitor OSNR.